Melting of Himalayan Glaciers

491. SHRI MAHENDRA MOHAN: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that UN Inter-Governmental Panel on Climate Change has warned that the Himalayan Glaciers are melting, with dire long-term consequences for water in the North;

(b) if so, whether Government have made any study on northern glaciers and their environment impact likely to occur for the northern regions;

(c) whether Government have any knowledge about the melting of Himalayan glaciers and at what pace they are melting; and

(d) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) Yes, Sir.

(b) The Geological Survey of India (GSI) has been undertaking glaciological studies on Himalayan glaciers since 1906 and systematic glaciological monitoring is being carried out in the Northern region since 1974. GSI has monitored more than 35 glaciers so far. During the last five years, alone, it has monitored 12 glaciers in Ghaghra basin in Uttarakhand and Bears, Parvati, Ravi and Bhaga basins in Himachal Pradesh. GSI has not undertaken any study to correlate the river discharge, water level changes in sea and ocean and the recession of the glaciers. In addition to glaciers, seasonal snow cover, groundwater, rainfall etc. contribute to the river discharge. Due to enhanced melting of ice, consequent upon faster recession, the runoff of the Himalayan rivers may increase marginally.

(c) and (d) GSI is aware of the melting of the Himalayan glaciers. Compilations of the data on secular movement of glaciers have revealed that the majority of the glaciers of the Himalayan region are passing through a phase of recession, which is a worldwide phenomenon. No abnormal rate of recession has been reported by GSI. Even in the Himalayan region, the rate of recession in different climatic zones is found to be variable on average and in year to year basis. The retreat parameters of 35 glaciers show that 43% of the glaciers in the Himalayan region are retreating in the range of 10 to 20m/yr. The causative factors for this variable retreat may be subnormal snowfall, higher temperature during summer, less severe winter or a combination of all of them. It could also be attributed to the phenomenon of rise in temperature, global warming, a topic which is still under debate.

Creation of special farms

†492. SHRIMATI MAYA SINGH: Will the PRIME MINISTER be pleased to state:

(a) whether it is fact that it is planned to create special farms on the lines of China to increase the number of tigers, lions and leopards in view of their decreasing number in the country;

(b) the estimated amount to be spent on it in one year;

†Original notice of the question was received in Hindi.